

What is claimed is:

1. An information storage system comprising:
  - an information storage medium;
  - at least one read/write head comprising a transducer for information introduction and/or retrieval from the information storage medium; and
  - an actuator supporting at least one read/write head for moving the transducer relative to the information storage medium;wherein the information storage medium has a composite nickel coating thereon including an electrolessly deposited nickel layer formed on a sputter deposited nickel layer.
2. The information storage system of claim 1 wherein the sputter deposited nickel layer comprises nickel-phosphorus.
3. The information storage system of claim 1 wherein the electrolessly deposited nickel layer comprises nickel-phosphorus.
4. The information storage system of claim 1 wherein the sputter deposited nickel layer has a thickness in a range of about 10 Å to about 1000 Å.
5. The information storage system of claim 1 wherein the electrolessly deposited nickel layer has a thickness in a range of about 0.5 microns to about 10 microns.
6. The information storage system of claim 1 wherein the composite nickel coating has a surface roughness (Ra) less than about 10 Å.
7. An information storage medium for use in an information storage system, comprising:
  - a disk having a composite nickel coating including an electrolessly deposited nickel layer formed on a sputter deposited nickel layer thereon.

8. The information storage medium of claim 7 wherein the sputter deposited nickel layer comprises nickel-phosphorus.
9. The information storage medium of claim 7 wherein the electrolessly deposited nickel layer comprises nickel-phosphorus.
10. The information storage medium of claim 7 wherein the sputter deposited nickel layer has a thickness in a range of about 10 Å to about 1000 Å.
11. The information storage medium of claim 7 wherein the electrolessly deposited nickel layer has a thickness in a range of about 0.5 microns to about 10 microns.
12. The information storage medium of claim 7 wherein the composite nickel coating has a surface roughness (Ra) less than about 10 Å.
13. A method of forming an information storage medium for use in an information storage system, comprising :
  - (a) sputtering a nickel layer on a disk; and
  - (b) electrolessly depositing a nickel layer on the sputtered nickel layer.
14. The method of claim 13 wherein the sputtered nickel layer comprises nickel-phosphorus.
15. The method of claim 13 wherein the sputtered nickel layer has a thickness in a range of about 10 Å to about 1000 Å.
16. The method of claim 13 wherein the electrolessly deposited nickel layer comprises nickel-phosphorus.
17. The method of claim 13 wherein the electrolessly deposited nickel layer has a thickness in a range of about 0.5 microns to about 10 microns.

18. The method of claim 13 wherein the nickel coating formed on the disk has a surface roughness (Ra) less than about 10 Å.
19. The method of claim 13 further comprising:
  - (c) depositing an underlayer on the nickel coating; and
  - (d) depositing a magnetic layer on the underlayer to form a magnetic recording medium.
20. The method of claim 13 further comprising depositing at least one zincate coating on the disk prior to the formation of the nickel coating thereon.